

ASSOCIATIONS BETWEEN MEDICINE AND LITERATURE.*

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"THE Personal Relations between Literature and Medicine" formed the subject of the brilliant first Lloyd Roberts Lecture delivered at the Royal College of Physicians of London on November 20, 1923, by Sir Edmund Gosse (1849-1928), who, like the "incomparable" John Philips (1676-1709) and Francis Thompson (1859-1907), author of 'The Hound of Heaven' (1893), had "entered on the physic line," but abandoned it to adorn that of polite letters. His lecture was especially appropriate as an initial fulfilment of a generous endowment; for David Lloyd Roberts (1835-1920), a great connoisseur and lover of books and of records, pictorial and otherwise of the past, recalls the memory of Richard Mead (1673-1754), the Maecenas of his age, and by the magnificence of his bequests reminds us of John Radcliffe (1653-1714) who was Mead's godfather in a professional respect.

Of Lloyd Roberts' personality his friend Dr. Herbert Spencer presented a living picture in the second Lloyd Roberts lecture (1924) before this Society, and to Sir Squire Sprigge we are indebted for the preservation of Lloyd Roberts' description of his position, viz., "not a consultant but a general specialist with a leaning towards women," and of his definition of gynaecology as "anything either curable or lucrative."

Though in their purely professional character medical men and women are invaluable to their patients, and during their life time are well known and correspondingly rewarded, it is remarkable how soon they are forgotten, like theatrical stars or popular vocalists, as if their names had been "writ in water." The main exceptions are those who, like Harvey, Sydenham, John Hunter, Edward Jenner and Lister, have also made great additions to medical knowledge. On the other hand, medical men whose services have not been solely physical, to use the word in its old-fashioned sense, but have also stimulated and satisfied the intellectual faculties of mankind by poetical or prose works, poorly as these may be remunerated during life, have a better chance of posthumous fame;

* The Lloyd Roberts Lecture delivered at the Medical Society of London on November 16th, 1933.



for *littera scripta manet*, or, in other words, books live longer than their authors and may bear their message to generations yet unborn.

Some men are much in advance of their times, or their work, like that of Mendel, has been discovered only years after their death. Wordsworth, Southey, and Walter Savage Landor declared that contemporary neglect afforded a negative presumption of permanent reputation. This, perhaps, naive expression of comforting self-esteem was criticized by Leslie Stephen, who argued against the view that great men have usually been overlooked by their own generation. In what degree the written labours survive is perhaps not a matter of great importance, for the writer can always optimistically anticipate that he will posthumously come into his own, and may not worry whether his works remain in the minds of the many or of the eclectic, or merely on the shelves or in the book stores of the great libraries, which, with a catholic completeness, retain everything both great and small. However welcome the quiet of a library, it is sometimes depressing and recalls the repose of a mausoleum, especially on reading for the first time the titles of folios brought forth in the sure and certain hope of a glorious immortality which for some reason or another never matured; this sympathy for unknown authors is not allayed by the estimate in 1911 that there are twenty-five million different books (Iwinski).

Though there is generally speaking an obvious distinction between technical works on medicine, such as systems, treatises and monographs, and literature in the usual sense of *belles lettres*, there are exceptions to prove the rule. W. H. Welch spoke of William Farr (1807-1883) as having "made literature out of statistics," and the 'Lectures on the Principles and Practice of Physic' (1843-72) of Sir Thomas Watson (1792-1882), for thirty years the chief English text-book, were read on account of their style after they had ceased to be up to date. It may be not without interest to consider who should be awarded the palm as the most prolific author of medical works. The medical writer in this country most likely to rival Daniel Defoe, with his 254 works, Sir Walter Scott, Sir William Dugdale (1605-86), author of the monumental 'Monasticon Anglicanum' (1655-61) and other large works, and in our day Edgar Wallace, is probably James Copland (1791-1870). He wrote the

whole of a 'Dictionary of Practical Medicine,' which took twenty-six years (1832-58) to come out and ran to three stout volumes of 3,509 pages in double columns; these small-type columns, if placed in succession, would extend for nearly a mile (N. Moore); this was by no means all the published work of the man who wrote more on medicine than any other fellow of the Royal College of Physicians of London of his or any past time.

Sir Edmund Gosse travelled over the subject from early times into the eighteenth century, finishing with a charming sketch of John Arbuthnot (1667-1735), the only begetter of "John Bull," who, with Sir Samuel Garth (1661-1719), and their much lampooned colleague, Sir Richard Blackmore (1653-1729), combined practice and *belles lettres* with such success that Gosse rather optimistically regarded this as the *coup-de-grâce* to the popular belief in the incompatibility of poetry and physic. Since those spacious times, the relations between medicine and literature have gradually undergone a change. In the sixteenth and seventeenth centuries medicine and the natural sciences were very closely allied; a large proportion of those eminent in biology and many of those in chemistry were members of the medical profession. Medicine and the natural sciences were for a long time part of the general knowledge of learned men, and the leaders of the medical world were scholar-physicians; of this humanistic combination, in which medicine was a special department of general knowledge, Nicolaus Leonicensus (1428-1524) of Ferrara, Thomas Linacre (?1460-1524), Caspar Bartholinus (1585-1629) and his son Thomas (1616-80) were fine examples. As late as 1839 Winslow wrote that in the medical profession there was a greater amount of scientific knowledge than perhaps in all the other professions put together.

But with the passage of years medicine grew up and brought up a family of specialities of her own. The scholar-physician has now become a *rara avis*, if not a vestigial relic. Sir Henry Hallford (1766-1844) was probably the last president of the Royal College of Physicians of London who composed elegant Latin verse ('*Nugæ metricæ*', by Sir H. H., Bart., 1839, privately printed) as he drove from one noble sickroom to another. The excursions of active practitioners into the realms of letters have become a rather unusual hobby, sometimes cautiously concealed until their position is assured or retirement is in sight. There are indeed, grounds for

the belief that anonymity is politic in view of the rather widespread preference among the public for a specialist, and a vague suspicion of medical practitioners who are openly interested in directions other than that of their profession. Thus the application of Albrecht von Haller (1708–77) for the post of physician to a hospital in 1734 was rejected with the explanatory excuse “He is a poet; why should he wish to be a hospital physician?” (Zimmermann). Thomas Denman (1733–1815), writing to cheer up Caleb Hillier Parry (1755–1822), who in his early days at Bath was despondent about practice, mentioned “the old observation” to the effect that “he is too good a poet to be a physician.” Weir Mitchell (1829–1914) when a young practitioner offered a publisher in Boston, Mass., a collection of verse; this was referred for an opinion to Oliver Wendell Holmes (1809–94), who advised his junior for the sake of his practice to confine such writings to his desk until he was securely in the saddle and about forty years of age; this Weir Mitchell more than obeyed and, except for some unsigned verses in 1857, did not publish anything for the lay public until his first novel, ‘Hephzibah Guinness,’ in his fiftieth year. Some of my friends have used a *nom de plume*: Leonard George Guthrie (1858–1918) was the “Lucas Galen” who brought out ‘Hospital Sketches’ (1902), in which humour and pathos are so happily blended; “Colin Tolly,” fortunately much alive, is the author of ‘Earth-Lays: Geological and other Moods’ (1915), ‘Knowledge and Dream; and Other Poems’ (1926), and ‘Horizons at Dawn and at Dusk’ (1928); William Gordon (1863–1929), M.D., F.R.C.P., of Exeter, under the modest title of ‘Odds and Ends,’ by “M.R.C.S.,” brought out in 1925 the occasional verses of some forty years, going back to his days at Cambridge, where he was slightly junior to Sir Charles Sherrington, who published ‘The Assaying of Brabantius, and other Verses’ (1925), dedicated to Sir Henry Head, the author of ‘Destroyers and other Verses’ (1919); they were a little senior to George Parker Bidder, the zoologist and composer of ‘By Southern Shore’ (1899) and ‘Merlin’s Youth’ (1899). These all confessed their authorship, as did Sir Ronald Ross (1857–1932), who was a poet and mathematician, but whose services to medical science far outweigh his other activities. On the other hand, our John Coakley Lettsom (1744–1815) sometimes thinly disguised himself in the ‘Gentleman’s Magazine’ as “J. C. Mottles”; Paul Broca (1824–80)

employed the less obvious anagram of "Bap. Lacour," and Richard von Volkmann (1830-89) wrote under the name of "Richard Leander."

Medical men see so much of human nature, of its failings and disappointments as well as of its self-sacrifices and triumphs, that they have plenty of opportunity for the study of mankind, and so for excursions into literature, which John Morley described as "the most seductive, the most deceiving, the most dangerous of professions." In spite or because of this, the proportion of authors among medical practitioners is not high: how it compares in this respect with the Church and the law there is not any means of estimating accurately; but as many more men without any serious intention of practising afterwards go to the Bar than into medicine, probably more briefless barristers than medical graduates drift into literary work. It has been claimed that medicine stands foremost among the professions in the number of men distinguished in literature who at least began life in its ranks (Mitchell Banks). Other medical writers have been less complimentary about the achievements of their profession in *belles lettres* and have given various explanations. An obvious reason is that men in practice have not the time to learn the art; other suggestions offered are that though medical men come into contact with much tragedy and not a little comedy, they hardly perceive it, or regard their experience from a professional standpoint and are handicapped by technical knowledge (Burr). It has also been said that medicine does not as a rule appeal to those with an artistic temperament, that the doctor's training is not favourable to the development of artistic tastes (Collins), and that there is a gulf often due to mentality between literature and science (H. Holland). Yet of our charity, and without any inferiority misgiving, let us begin at home and recall, as Garrison (1932) has pointed out, that there is a great literary tradition in British medicine, dating from Linacre and reaching its zenith with the tenure of the Regius chairs at Oxford and Cambridge of Osler (1849-1919) and Clifford Allbutt (1836-1925), who with the broadest outlook on medicine as a whole, greatly encouraged interest in its historical aspects. Osler, speaking of Sir Thomas Browne, his favourite and prototype in life's philosophy, said: "Among physicians, or teachers of physic . . . Rabelais stands apart with the kings and queens of literature. Among the

princes of the blood there are differences of opinion as to rank, but Sir Thomas Browne, Holmes, and John Brown of Edinburgh form a group together high in the circle."

As medical men are much engaged in tracking down the causes responsible for disease it would seem natural that they should therefore be attracted to the detection of crime and the writing of the popular detective novel. Conan Doyle (1859-1930), who was for some years in general practice at Southsea and for a short time an ophthalmic surgeon with rooms in Upper Wimpole Street, is the outstanding example. R. Austin Freeman has followed suit in a number of detective stories in which "Dr. Thorndyke" is the central figure. A friend of mine, Edgar Beaumont (1861-1921), under the name of "Clifford Halifax," was the joint author with Mrs. T. L. Meade of a series of detective "Stories from the Diary of a Doctor" (1893-4) and "The Adventures of a Man of Science" (1896) in the 'Strand Magazine,' he supplying the plot and she the text.

Medical men show activity in letters at various ages and stages of life: (a) some before embarking on the study of medicine, literature being their first choice; (b) some medical students have never gone further and have devoted their lives to writing, such as Sir Edmund Gosse and Francis Thompson, the latter having been nominally a medical student for eight years; (c) others after qualification have soon retired from medicine in favour of literature, as in the case of Keats and Schiller (1759-1805), or have followed "the draggle-tailed muses," to use Goldsmith's words, for a time only while waiting for practice, sometimes returning later when retirement provides the opportunity but not necessarily the ability for such devotion; (d) others have practised medicine and, as an intermittent hobby, versification together, such as Henry Vaughan (1622-95), "the Silurist," Edward Jenner (1749-1823), W. S. Thayer (1863-1932) and John McCrae (1872-1918), and this is much the largest group; (e) others not until middle or later life, after years of busy practice. To the first and last of these categories a little more will now be said.

LITERARY ACTIVITY BEFORE EMBARKING ON THE STUDY OF MEDICINE.

Poetry or prose has been the first love of some distinguished in medical science and practice. Nearly a century ago, two young

men, destined to become the foremost physiologists in France, journeyed within four years of each other to Paris, bearing their literary offspring with high hopes ; only to receive the disappointing but kindly advice to adopt some other means of obtaining a livelihood, such as medicine. In 1834, Claude Bernard (1813-78), whose comedy 'La Rose du Rhône,' had been produced at Villefranche, submitted a play, 'Arthur de Bretagne,' to Saint Marc Girardin (1801-73), professor at the Sorbonne. Charles Edouard Brown-Séquard (1817-94), who had written verses, plays and novels, had a similar experience in 1838 with the literary critic Charles Nodier (1783-1844). Bernard's 'Arthur de Bretagne' was brought out posthumously in 1886, but nothing of Brown-Séquard's early efforts in literature had a future life.

Thomas Lodge (1558-1625), second son of Sir Thomas, Lord Mayor of London in 1562-3, led a varied life. A scholar of Trinity College, Oxford, he entered Lincoln's Inn, but continued his Oxford habit of versification and wrote a number of pamphlets and plays, such as 'A Defence of Poetry, Music and Stage Plays' (1580), and 'An Alarum Against Usurers' (1584). Then after a brief experience as a soldier he took a number of long voyages. Returning to London he brought out anonymously, in 1590, 'Rosalynde : Euphues Golden Legacie ; found after his Death in his Cell at Silixedra,' a romance on which Shakespeare drew largely for the plot of 'As You Like It.' He went on making voyages and writing until 1596 when he changed his religion and started on the physic line, taking the doctorate at Avignon about 1600 and becoming incorporated M.D. at Oxford in 1602. Setting up practice in Warwick Lane he dedicated to the Lord Mayor and Corporation of London 'A Treatise of the Plague' in 1603, a year which saw the plague raging in London, and also a further edition of 'Present Remedies against the Plague written by a learned physician for the Health of his Countrey'; this black-letter brochure originally appeared in 1594 and has been reprinted as No. 7 of the Shakespeare Association Facsimiles (1933); the identity of the "learned physician" is not known, and in 1594 Lodge could not lay claim to this description. He acquired a considerable practice in London, especially among the Roman Catholics, was mentioned in 1609 as one of the leading physicians, and was introduced into a satirical poem dealing with London doctors in 1620. He did not give up

literary labours entirely, for he translated 'The Workes of Lucius Annaeus Seneca' (3-65 A.D.), 'both Morall and Naturall' (1614) and 'A learned Summary upon the famous Poeme of William of Saluste, Lord of Bartas,' "translated out of the French (1625), by T. L., D[octo]r M[edicus] P[hysicus]." He died of the plague in that year, and goes down to fame as a man of letters rather than of medicine, as is shown by the fact that in the 'Dictionary of National Biography,' Leslie Stephen, the editor, wrote his life in considerable detail.

Thomas Campion (1567-1620), well known as a lyric poet and musician, was most successful in setting his own words to music; he also wrote on musical composition but not on medicine, which he probably did not begin to study until after 1602, and he did not practice until late in life.

Martin Lluellyn, Lluellyn, or Llewellyn (1616-82), educated at Westminster and as a student of Christ Church, Oxford, became M.A. in 1643 when he was fighting for the King. Three years later, his 'Men Miracles, with other Poems' (by M. L.: St. of Christ Church in Oxon) appeared. In October, 1648, he was ejected from Oxford by the Parliamentary visitors and went to London where he prosecuted "his genius as much to physic as before he had to poetry." He published odes on the occasion of the Restoration in 1660, and was appointed physician to Charles II and principal of St. Mary's Hall, Oxford. In 1664 he moved to High Wycombe where he practised, became Mayor, and is said to have written 'Wickham wakened; or the Quaker's Madrigall in Rime dogrell' (1672) against a quaker practitioner who had interfered with his practice.

Mark Akinside (1721-70), who changed his name to Akenside possibly in order to avoid the obvious nosological association, was a precocious poet; when sixteen he had a poem 'Virtuoso' accepted by the 'Gentleman's Magazine,' and in the following year began 'The Pleasures of Imagination,' published at first anonymously in January, 1744, the year he took the doctorate at Leyden; in 1757 he rewrote 'The Pleasures of the Imagination,' with this slightly changed title, but without any improvement. After practising for some years and bringing out occasional odes, he was elected physician to St. Thomas's Hospital in 1759; he enjoyed a fashionable practice, became a Court physician (1761), and when

seeing poor patients kept them at a respectful distance with his long sword and porters with brooms.

Thomas Lovell Beddoes (1803-49), was the eldest son of Thomas Beddoes (1760-1808), of the "Pneumatic Institute," at Clifton, Bristol, and the nephew of Maria Edgeworth (1767-1849), the novelist. While an eccentric undergraduate at Oxford, he wrote a successful drama, 'The Bride's Tragedy' (1822), and a number of fragmentary pieces, many of which were not published until after his death. In 1825 he went abroad, began his 'Death's Jest Book, or the Fool's Tragedy,' which he continued to polish for the rest of his life, and took up medicine. Under Blumenbach, at Göttingen, he gained such a reputation as physiologist that he was nominated in 1835 as a professor at Zürich, but the appointment was not confirmed on account of his democratic opinions. He practised in Zürich and elsewhere, was much mixed up with the political disturbances, and died some time after amputation of a leg necessitated by a self-inflicted wound. He left a note, "I ought to have been, among other things, a good poet," to his literary executor, T. F. Kelsall, who published 'Death's Jest Book' (1850) and his 'Poems' (1851).

LITERATURE NOT PURSUED UNTIL MIDDLE OR LATER LIFE.

Not uncommonly the impulse, or in modern parlance the urge, to write or, more committal, to publish articles or books on subjects quite outside their profession is suppressed until the stage of the sere, the yellow leaf is approaching, as in the case of Weir Mitchell. Often no doubt the result of the early inhibition is a permanent muteness as regards verse, for as Sainte-Beuve pointed out, in most men the poet dies young while the rest of the man lives on; but as regards prose, and especially autobiography, there are plenty of examples (*vide* p. 14).

Erasmus Darwin (1731-1802) sacrificed early poetic ambitions to his profession, and it was not until he was nearly sixty that he published, and then anonymously, his first poem, 'The Botanic Garden,' in two parts, the second of which, 'The Loves of the Plants' (1789), came out before the first, 'The Economy of Vegetation' (1792); this was a popular success, and went into a fourth edition in 1799; but its absurd side was shown up in 'The Loves

of the Triangles,' by George Canning (1770-1827) in the 'Anti-Jacobin,' which he and George Ellis (1753-1815) founded. Darwin appears to have taken the parody in good part. Two more of his poems, 'The Temple of Nature or the Origin of Society (1803), and 'The Shrine of Nature,' appeared posthumously.

Thomas Gordon Hake (1809-95), was for a time physician to the West London Hospital, but about the age of fifty he left medicine to become a Victorian poet, and the author of two novels.

The enormous amount of material available for consideration of the associations between Medicine and Literature is shown by the 1310 items under the heading "Bibliotheca litteraria" in the 'Bibliotheca Osleriana' (1929). That section deals with the relations of medicine and science with the world of letters, with medical and philosophical poems, with what (after Oliver Wendell Holmes) are called "medicated novels" and the doctor in fiction, the hobbies of medical men, and medical works by laymen; in addition the divisions of the "Bibliotheca biographica" containing 296 items, and the "Bibliotheca bibliographica" with 637 entries, supply much more information. Since this address was nearly completed Professor T. K. Monro's comprehensive work 'The Physician as Man of Letters, Science and Action' has been published and is a veritable mine of information. It is indeed difficult to know where to begin, and harder even where to stop in dealing, however superficially, with a subject so gigantic. In what follows, reference will be made with a few illustrations to (i) medical poets (ii) medical biographers, autobiographers and autopathographers; (iii) medical bibliographers and librarians; (iv) miscellaneous forms of literary activity by medical men; and (v) the doctor in contemporary literature and fiction.

MEDICAL POETS.

The relations of poetry and physic have long attracted attention. Thomas Bartholin (1616-80), the Danish anatomist who wrote 'Carmina varii Argumenti' (1669), and is said to have touched almost all branches of knowledge, brought out in 1669 a small volume of 149 pages, 'De Medicis Poetis,' dealing with medical men's verses on the art of war and with poets who had written on medicine. In Broeck's dissertation, 'Sur les médecins-poètes belges,' there are

50 of his countrymen, and in 1874 Achille Chéreau (1817-85) collected the names of no less than 479 medical poets and versifiers of all nations, 91 of whom wrote on purely medical subjects. C. L. Dana, in 1916, printed a charming catalogue raisonné of his collection of the works of more than 150 medical poets and versifiers, ranging from Empedocles (B.C. 500) up to the time of publication.

Poetry, the crown of literature, was defined by John Dryden as articulate music; it is an imaginative and beautiful method of expression, something more than verse and rhymed prose; it has been distinguished as verse which can at least be called literature, and stands in the same relation to prose that a great painter's masterpiece does to a photograph. In spite of Alfred Noyes' dictum that "there is no precision of expression like the precision of great poetry," most people read poetry for its music or "majesty of melody," to borrow a phrase from Oscar Wilde, as in Swinburne's 'Atalanta in Calydon,' rather than for scientific and accurate information. As Apollo, the father of Aesculapius, was not only the God of the fine arts, including poetry, but also of medicine, and was endowed by Jupiter with the power of foreseeing the future (prognosis), there is thus a classical justification for the possession of poetic efficiency by "the sons of Apollo" as those practising the art of healing have been called.

Surer ground for believing that there are links between the poet and the follower of physic is the consideration that imagination, sympathy, and psychological understanding are as essential for the highest functions of the medical man as for the poet. Imagination is a valuable initiative in solving problems and planning research, but must be strictly controlled by subsequent investigation and, in Leslie Stephen's words, "the slow and chilly processes of scientific reasoning"; as Claude Bernard insisted, hypothesis must be discarded like an overcoat on entering the laboratory. The master poets, Shakespeare, Dante, and Keats, were concerned with the whole range of human activities, so that Terence's maxim *Homo sum; humani nihil a me alienum puto*, the motto of the London Hospital, describes their attitude to the world around them. Keats, "the greatest of Shakespeare's successors" and the foremost poet with a medical qualification, was, like Schiller, Goldsmith, Crabbe and others, influenced by professional training and work. The philosophic interest which in early life attracted Coleridge, Southey

and some others for a brief spell to medicine did not interfere with their poetic talent, and the experience thus gained of human nature can hardly have failed to engender a wider sympathy and understanding.

In clinical diagnosis there are two processes : the conscious logical and the rarer, though not less efficient, "clinical instinct," which is supplied by the unconscious. So, too, versification may be an exacting process, as in scholastic composition, or an impulsive outburst, as Burns in the First Epistle to Davie described :

The words come skelping, rank and file,
Amaist before I ken.

This bubbling up from the unconscious, the critical professor of Latin in the University of Cambridge, author of 'The Shropshire Lad,' has found to be facilitated by drinking a pint of beer for lunch as a sedative to his brain and taking a walk while not thinking of anything in particular ; on one occasion two stanzas came forth as they were eventually printed, a third followed "with a little coaching after tea." One more was needed, but as it did not come he had to turn to and compose it himself, "and that was a laborious business." Prof. A. E. Housman wrote it 13 times, and it was more than a year before he was duly satisfied.

Before the invention of the printing press in the fifteenth century, the first important medical book to be printed being Celsus' 'De Medicinâ Libri octo,' in 1478, at Florence, by Nicolaus Laurentii, poetry and verse were of mnemonic value in the transmission of medical lore. Such didactic poetry was, perhaps, one of the earliest uses of verse, and some primitive people still preserve their knowledge in verse. The 'Regimen Sanitatis' (? 1100 A.D.) was the most popular poem in medical literature, and was highly prized as a handbook of domestic medicine. Gilles de Corbeil (Aegidius Carboliensis, (? 1140-1224 ?), who was a divine and physician to Philippe Auguste (1180-1223), King of France, clad his works on the urine, pulse, and the properties of drugs in verse ; estimates of his literary powers are discordant ; Jourdan's 'Biographie médicale' deprecated Fracastoro's award of the second rank among medical poets as too high an honour, but Dana would regard him as "the poet laureate of Salerno and mediæval medicine." Girolamo Fracastoro (1483-1553), of Verona, wrote one of the most famous medical poems : 'Syphilis sive Morbus Gallicus,' in 1530, which was translated into

English in 1693 by Nahum Tate (1652–1715), poet laureate (1692–1714), who has been regarded as a candidate for the lowest place among the 19 laureates. Though rare in these days, versification of medical topics persisted after the introduction of printing; David Kynaloch (1559–1617), a Scot, published a students' medical compendium in Latin verse, 'De Hominis procreatione, Anatome, ac Morbis, etc.', Paris, 1596; Dana also mentions the description, in hexameters, of the muscular attachments given in the 'Myologia heroico Carmine expressa,' of Charles Spon (1609–84), published posthumously in the 'Bibliotheca anatomica' (1685) of the laborious compiler, J. J. Manget (1652–1742). More than half a century later, John Armstrong (1709–79) brought out the didactic work 'The Art of Preserving Health' (1744) in fine blank verse.

Among the poet laureates, the only medical man was Robert Bridges (1844–1930), whose last work, 'The Testament of Beauty' (1929), was the ripest. After a classical education at Eton and Corpus Christi, Oxford, he started medicine, was casualty physician at St. Bartholomew's Hospital, and dutifully wrote 'Carmen elegiacum de Nosocomii sancti Bartolomæi Londinensi,' 1877, with thumb-nail portraits of the staff. It is said that when sitting for the membership examination of the Royal College of Physicians of London, in 1877, and answering the paper in which short pieces of Greek and Latin were set for translation, he turned the Greek into Latin and the Latin into Greek, whimsically explaining afterwards that the examiners had stupidly failed to indicate the language into which the pieces set were to be turned. Unlike Keats, who was poor and gave up medicine when he was qualified at the Apothecaries' Society, Bridges, with ample means, became active as assistant physician to the Great Northern Hospital and the Hospital for Sick Children, Great Ormond Street, and did not retire from medicine until he was 37, the age said to be fatal to genius. Previously the nearest approach to a qualified medical man in the office of Poet Laureate, or *Versificator Regis* was Robert Southey (1774–1843) who, after Walter Scott had declined the honour and generously pressed his friend's claims, was appointed in 1813, a hundred years before Bridges. Southey's career as a medical student was soon terminated by his dislike of anatomy, but he wrote the poem 'The Surgeon's Warning' and brought out 'The Doctor' (1834–7), described as a "glorified commonplace book," in seven volumes.

John Keats (1793-1821) became a licentiate of the Society of Apothecaries on July 26, 1816, being one of the early successful candidates at the examination instituted as a result of the Apothecaries Act, 1815. He passed with credit and would, B.W. Richardson believed, "if he had once tasted the true spirit of medicine, have become one of her greatest sons." He was eloquently described by Oscar Wilde as "one who walks with Spenser, and Shakespeare, and Byron, and Shelley, and Elizabeth Barrett Browning in the great procession of the sweet singers of England."

Garth's mock heroic poem 'The Dispensary' (1699) was a fighting appeal on the side of the free dispensary to be organized by the Royal College of Physicians in London, and under a thin disguise the leaders on both sides were praised or satirized. With it may be contrasted a very rare work, 'A Medical Review: A poem being a Panegyric on the Faculty of Dublin Physicians, Surgeons and Apothecaries marching in Procession to the Temple of Fame,' by John Gilborne, M.D., of Dublin, 1775. It is dedicated to Robert, Lord Baron Trimleston, and begins

Review, great Trimleston with gracious eye
Eblana's Faculty as they pass by.

The names are undisguised, and praise is distributed with uncritical charity.

MEDICAL BIOGRAPHERS, AUTOBIOGRAPHERS, AND AUTOPATHOGRAPHERS.

Medical men actively engaged in biography may be roughly divided into the three categories of those who have been mainly concerned with (i) biography in general, (ii) biographical dictionaries of medical men, and (iii) biographies of individual colleagues.

(i) Few medical men have devoted themselves to general biography. John Aikin (1747-1822) was the prolific contributor of more than half the articles in the ten volumes of 'General Biography; or, Lives Critical and Historical, of the most Eminent Persons, of all Ages and Countries (1799-1815)'; Fulton in his recent account of the Warrington Academy and of Aikin speaks of this work as a "predecessor" of the 'Dictionary of National Biography,' but it is not acknowledged as such in Sidney Lee's preface to the sixty-third and last volume of the original issue,

probably because it aimed at being universal and not British only. Dibden refers to the delays in its completion due to its tardy sale, and Lowndes' 'Bibliographer's Manual' (1864) quotes the cruel comment "a worthless compilation," by Gifford; this was probably William Gifford (1756-1826), editor of the 'Quarterly Review,' who, according to Southey, "looked upon authors as Izaak Walton looked upon worms—something beyond the pale of human sympathy." Aikin brought out 'Biographical Memoirs of Medicine in Great Britain from the Revival of Literature to the Time of Harvey' (1780), and wrote lives of John Howard (1792), the philanthropist, John Selden and Archbishop Usher (1811), and other works, so that he also comes into the second category of biographers. Thomas Young (1773-1829), "alike eminent in almost every department of human learning," wrote for the 'Encyclopædia Britannica' the lives of forty-six men of science and letters, including that of his intimate friend Richard Porson. Samuel Smiles (1812-1904) was a medical student at Edinburgh with Dr. John Brown (1810-82) the author of 'Rab and his Friends' (1859), and then practised at "sleepy" Haddington before he gave up the lancet for the pen and wrote 'Self-Help' (1859) and biographies, especially of George Stephenson and other engineers.

(ii) Medical men who have written or edited biographical dictionaries of medical men are numerous, as is obvious from the imposing list drawn up by Garrison in 1928 and tabulated under different countries with Germany leading. Except to quote Fulton to the effect that the earliest dictionary of medical biography in any language is 'De Medicinæ Claris Scriptoribus, 1506,' by Symphorien Champier (1472-1539) of Lyons, reference will be made here to those only of British origin. In the first place come 'The Roll of the Royal College of Physicians of London' from 1518, 2nd edition 1878, by W. Munk (1816-98), and Plarr's 'Lives of the Fellows of the Royal College of Surgeons of England' from 1843 in two volumes (1930). After the death of Victor Gustave Plarr (1863-1929), Librarian of the Royal College of Surgeons, the volumes were brought out by D'Arcy Power, W. G. Spencer and G. E. Gask. Both these sources of reference are being kept up to date. Benjamin H. Hutchinson in his 'Biographia Medica' (two vols., 1799; 2nd edition, 1809) was "particularly attentive to do justice to the learned and ingenious in all countries." An

otherwise rather fruitless search for further information showed that he was described as two separate individuals in a well-known German work on medical biography ('Biographisches Lexicon,' 1931, III, 352). 'The Gold-headed Cane,' by William Macmichael (1783-1839), came out anonymously in 1827, his name not appearing on the title-page until the fourth edition in 1915, brought out in America by Francis R. Packard, thus recalling the Biblical statement about a prophet in his own country. It dealt in a pleasant gossipy style with the experience of the 'Cane' between 1689 and 1825 in the hands of its owners—Radcliffe, Mead, Askew, William and David Pitcairn, and Baillie. It was expanded in the third edition (1884) by William Munk so as to carry the record down to 1871, and in the sixth edition (1932) Herbert Spencer Robinson added a most extensive historical commentary. In 1830 Macmichael followed up 'The Gold-headed Cane' by editing the also anonymous 'Lives of British Physicians,' and wrote six out of the eighteen contained biographies. William Wadd (1776-1829) was the author of 'Nugae Chirurgicae; or, A Biographical Miscellany, illustrative of a Collection of Professional Portraits' (London, 1824), 'Nugae Canoraë; or, Epitaphian Mementos (in Stonecutters' Verse) of the Medici Family of Modern Times,' by "Unus Quorum" (London, 1827), and 'Mems., Maxims and Memoirs' (London, 1827), which contained many professional anecdotes of an interesting, though not always strictly accurate character. D'Arcy Power remarks, "Many have utilized them, but few have acknowledged their indebtedness." A similar but anonymous work, 'Professional Anecdotes; or, Ana of Medical Literature' (1825), enjoyed a popular vogue. F. B. Winslow's 'Physic and Physicians; a Medical Sketch Book' (1839) contained much interesting gossip in its two volumes, which were cautiously also brought out anonymously.

T. J. Pettigrew (1791-1865), whose life was written by Warren R. Dawson in 1931, brought out 'The Medical Portrait Gallery' in four volumes (1838-40), which was never completed as the demand did not promise to meet the cost; among its sixty memoirs a few were of living men. Pettigrew also wrote no less than 540 lives, beginning with J. M. Adair and ending with Claude Nicolas de Cat in Rose's 'New General Biographical Dictionary,' but did not continue further on account of the editorial interference. Pettigrew

was thus obviously a man of enormous energy ; but in addition he was surgeon to the Duchess of Kent and in that capacity vaccinated her daughter, Queen Victoria, was surgeon to Charing Cross Hospital, Registrar of the Medical Society of London, Egyptologist, and author of many books including 'Memoirs of the Life and Writings of J. C. Lettsom,' three volumes, 1817. In 1867-8, the two volumes of 'Photographs of eminent medical Men of all Countries, with brief analytical Notices of their Works' appeared ; the first volume was edited by T. Herbert Barker (1814-65), of Bedford, and appeared posthumously, the second by Sir William Tindall Robertson (1825-89), of Nottingham. In spite of the title, all the forty-eight biographies were of British medical men, and nearly all alive at the time, some of whom are now entirely forgotten. This work met with unfavourable criticism from some members of the profession on the score of advertisement. In 1885, 'Eminent Doctors: their Lives and their Work' in two volumes, was brought out by G. T. Bettany (1850-91), lecturer on botany at Guy's Hospital but not a medical man ; he, however, with Norman Moore (1847-1922), J. F. Payne (1840-1910), and D'Arcy Power, wrote most of the lives of medical men in the 'Dictionary of National Biography,' and was joint author with Samuel Wilks (1824-1911) of a 'Biographical History of Guy's Hospital' (1892). In the 'History of the Medical Teaching of Trinity College, Dublin, and of the School of Physic in Ireland' (1912), T. Percy C. Kirkpatrick, the medical historian of Ireland, gave short notices of the prominent teachers, and J. D. Comrie, in the two volumes of his 'History of Scottish Medicine' (1932), has patriotically followed suit.

(iii) The lives of medical men written by their professional colleagues mount up to a considerable total. Outstanding figures, such as Harvey, John Hunter, and Lister, have been the subject of biographies by several hands ; Harvey's life was written in 1766 by Thomas Lawrence (1711-83), in 1878 by Robert Willis (1799-1878), and in 1897 by D'Arcy Power ; John Hunter's in 1794 by Everard Home (1756-1832), and by Jesse Foot (1744-1826) the elder, in 1835 by Drewry Ottley, in 1893 by Timothy Holmes (1825-1907), and in 1897 by Stephen Paget (1855-1926) ; Lister's in 1917 by Rickman Godlee (1849-1925), in 1925 by Watson Cheyne (1852-1932), in 1912 by Cuthbert Dukes, and in 1913 by G. T. Wrench. They are also constantly praised in the orations dedicated to their

memory. The life of Thomas Linacre (1460?-1524) was written by J. N. Johnson (1787-1828) and published in 1835, and shorter but critical accounts of this scholar-physician have been given by his followers, J. F. Payne (1840-1910) in 1881 and by Osler in 1908. The lives of the brothers Sir George Paget (1809-92) and Sir James (1811-99) were brought out by their sons, C. E. (1855-1927) and Stephen (1855-1926), the latter also writing the lives of Ambroise Paré (1510-90) and Victor Horsley (1857-1916). The life of Sir William Turner (1832-1926), a pupil of Sir James Paget and professor of anatomy at Edinburgh for thirty-six years, was brought out by his son, Logan Turner. Alexander Macalister (1844-1919), who was professor of anatomy for 36 years at Cambridge, was the author of the life of James Macartney (1770-1843), his predecessor in the chair of anatomy and chirurgery at Trinity College, Dublin. The intriguing personality of John Coakley Lettsom (1744-1815), a founder and benefactor of the Medical Society of London and a biographer, has for more than a century stimulated medical writers to do him justice; thus Pettigrew in 1817, St. Clair Thomson in 1917, and J. J. Abraham in 1933. The two most important lives of recent years, that of Lord Lister by Sir Rickman J. Godlee, in 1917, which disproves Stopford Brooke's dictum that a good biography cannot be written by a relative, and the life of Sir William Osler, by Harvey Cushing, in 1925, thus showing the fallibility of the belief that a friend makes a bad biographer, have both been by surgeons.

Autobiographies.—It has been said that no medical man of letters has ever succeeded in depicting in fiction the doctor, because medical authors tend to write their own biographies (Burr). But in spite of Virginia Woolf's warning that very few, perhaps only Montaigne, Pepys, and Rousseau, have really succeeded in telling the truth about themselves, there have been plenty of professed autobiographies, perhaps another story, by medical men, and naturally others have drawn on their experiences in constructing characters in fiction. In 1928, Garrison tabulated seventy-three autobiographies of remarkable medical men of all nations, and four years later, W. J. Bishop, library assistant at the Royal College of Physicians of London, collected ninety-one examples of various forms of autobiography by British medical men, some being very brief; ten of these ninety-one also appeared in Garrison's list, and two

were by women doctors, Elizabeth Blackwell (1821–1910) and Mary Scharlieb (1845–1930). The autobiographer is the medical historian's best friend for he provides items of interest which otherwise would pass unrecorded. Usually written late in life when self-advertisement is not so likely to be offensive as when produced, as indeed has been recommended, at the age of forty, such life histories have an attraction all their own. Autobiographical details naturally often appear in fiction, for example in 'The Adventures of Roderick Random' (1748), by Tobias Smollett (1721–71). Sainte-Beuve (1804–69) shortly after he was a medical student wrote autobiographically in 'La Vie, poésies et pensées de Joseph Delorme' (1829). Since the war, medical autobiographies have been plentiful, the best seller being Axel Munthe's 'Story of San Michele' (1929).

Autopathography (a word absent from the 'New English Dictionary,' Oxford) is a special form of autobiography, namely, the patient's account of his suffering. Some are not by medical practitioners, for example, Montaigne (1533–92), John Dalton (1766–1844), and Anne, Viscountess Conway (1631–79); but in the main they justify the reproach implied in the translation (Luke, iv, 23), "Physician, heal thyself," though its proper meaning is "treat thyself." From the point of view of nomenclature, the most remarkable is Thomsen's disease or myotonia congenita, described in 1876 by Julius Thomsen (1815–96) of Kappeln, Schleswig, who was the subject of this disease hereditary in his family for five generations; this particular eponym is exceptional in also exemplifying the use of the patient's name to describe his malady, as has been employed in some very rare syndromes by Jonathan Hutchinson (1828–1913) in "Mortimer's disease" (for lupus vulgaris multiplex non-ulcerans et non-serpiginosus) and by Pierre Marie in "Hagner's disease" (a condition confused with acromegaly). John Dalton gave the first detailed description (1794) of colour-blindness with which he and his brother were affected, and has therefore been called "Daltonism." Perhaps the best and most familiar account of a doctor-patient's sufferings, which certainly added to the knowledge of the subjective symptoms of acromegaly, is to be found in 'Acromegaly, a Personal Experience' (1912) and 'The Apologia of an Acromegalic' (1927) by L. P. Mark (1855–1930).

Books of travel are a form of autobiography. In the fifteenth and subsequent centuries medical men probably travelled more abroad

than the members of the other learned professions. The medical schools in Italy, especially Padua, attracted many, and to Leyden, more particularly in the time of Hermann Boerhaave (1668-1738), numerous university students flocked for teaching and the doctorate. During the frequent wars, prominent physicians and surgeons went with armies or their commanders in a temporary position of importance. Some made the "grand tour" on their own account, such as Anthony Askew (1722-74), and more as the medical attendants of the well-to-do. Others have gone as naturalists, like Sir Hans Sloane (1660-1753) to Jamaica in 1687, Sir John Richardson (1787-1865) to the Arctic in the last century, and E. A. Wilson (1872-1912) to the Antarctic in this century. Among medical missionaries, David Livingstone (1813-73) stands out as one of the greatest explorers. Since 1715 the generous benefaction of John Radcliffe has enabled Oxford graduates to see the world as Travelling Fellows; his intention was thus to improve the raw material for appointments to University professorships at Oxford rather than to benefit the medical profession generally as the endowment has done from the start (Nias). William Macmichael, a Shropshire lad and a Radcliffe Travelling Fellow from 1811 to 1821, spent some years in Russia and the East, visiting Moscow twice, in 1814 and 1817, and in 1819 published a handsome quarto with his drawings, 'Journey from Moscow to Constantinople in the years 1817, 1818.' George Hall, a Radcliffe Travelling Fellow from 1822 to 1832, published 'An Excursion from Jericho to the Ruins of the Ancient Cities of Geraza and Amman' (1852). Richard Bright (1789-1858) and Henry Holland (1788-1873), the future Court physician, when medical students in Edinburgh in 1810 went with Sir George Steuart Mackenzie (1780-1848), the mineralogist, to Iceland, and Bright wrote the account of botany and natural history in the 'Travels in Iceland' (1811), to which Holland also contributed. This experience seems to have stimulated their love of adventure, for Holland travelled for three months annually for forty-eight years, publishing in 1815 'Travels in the Ionian Islands, Albania, Thessaly and Macedonia in 1812 and 1813,' and his later experiences in 'Recollections of Past Life' (1872). Bright started on a long Continental tour in 1814, first visiting a number of clinics and in 1815 travelling in Austria and Hungary, a record of which he embodied in 'Travels from Vienna through Lower Hungary'

(1818). John Bell (1763–1820), a pioneer of surgical anatomy in Edinburgh, visited Italy when in bad health, and left a fine account of his travels published posthumously. An interesting figure is C. L. Meryon (1783–1877), the medical attendant of the eccentric Lady Hester Stanhope (1776–1839), who lived in despotic state on Mount Lebanon from 1814 until her death. He wrote ‘Memoirs of The Lady Hester Stanhope, as related by herself in Conversation with her Physician,’ three vols., 1845, recorded with almost Boswellian self-effacement, and ‘Travels of Lady Hester Stanhope, forming the completion of her Memoirs related by her Physician,’ three vols., 1846. The Osler Library at Montreal contains four small and little known books of his verse, including one privately printed, only five copies, ‘’Tis all my Eye and Betty Martin, or the Folly of Men’s Pursuits’; over the head-title, the derivation (?) has been added in pencil, “Oh! mihi, beate Martine.” George Henry Kingsley (1827–92), a younger brother of Charles Kingsley, specialized in the treatment of individual patients, especially by travelling, and brought out ‘South Sea Bubbles by the Earl (of Pembroke) and the Doctor,’ 1872. The books of travel by Sir Frederick Treves (1853–1923) and Sir John Bland-Sutton are familiar to all.

MEDICAL BIBLIOGRAPHERS AND LIBRARIANS.

Bibliography was formerly regarded as the somewhat dry-as-dust labour of recording the architecture or anatomy of books, their editions, titles, colophons, printers, dates, places, sizes, and so forth, but in no way concerned with their contents or authors. It was very firmly laid down in 1900 by John Ferguson (1837–1916), professor of chemistry at Edinburgh, that a bibliographer should be a book-ethnologist, not a book-ethicist. It has been defined as “the science of the organisation of recorded knowledge” (Hulme), and described as the common ground of the humanities looking backward and the sciences looking forward (Speath). Osler in 1902 broadened the scope of bibliography by adding a summary of the contents and some details about the author; this is bio-bibliography which the ‘New English Dictionary’ (Oxford, 1888) defines as dealing with the life and writings of the author, and quotes its use as long ago as 1809 in one of R. Southey’s letters. More recently Hoesen and Walter, who regard bio-bibliography

as but one of thirteen forms of bibliography, define it as biographical dictionaries of authors with lists of books by and about them. The bio-bibliographical method was a feature of the 'Bibliotheca Osleriana' (1929), hailed as "the greatest achievement of the humanistic movement in medical bibliography" by John Fulton, who, in an article on the humanization of bibliography, points out that in 1906 Ferguson, in spite of his uncompromising attitude six years before, published an admirable bio-bibliography, the 'Bibliotheca Chemica' or the catalogue of the chemical and allied books in the library of Professor James Young (1811-83) of Glasgow. In the 'Bibliotheca Osleriana' Osler characteristically praises both Ferguson's contributions most highly without a word about his own paper in 1902.

Medicine, according to Dr. Archibald Malloch, librarian of the New York Academy of Medicine, has probably been better served by bibliographers than has any other branch of learning.

Conrad Gesner (1516-65), Professor of Natural History at Zürich (1555) brought out his 'Bibliotheca Universalis sive Catalogus' (1545-9) in 20 volumes, 'Historia Plantarum' (1541), 'Historia Animalium' in four volumes (1551-8), and was the author of 38 books in all, including works on medicine, chemistry, and philology. Dibdin (1811) spoke of "the learned and modest Gesner's 'Bibliotheca' as the first thing, since the discovery of the art of printing, which enabled the curious to become acquainted with the works of preceding authors," and called him "the father of bibliography"; Osler, who spoke of Gesner as "a great friend," took the 'Bibliotheca Universalis' as one of the models for the 'Bibliotheca Osleriana.'

Albrecht von Haller (1708-76) was the greatest medical bibliographer of the eighteenth century, and was not surpassed until J. S. Billings (1838-1913) began the 'Index Catalogue of the Surgeon-General's Library' in 1880. Von Haller's wonderful versatility has been applauded by many writers from J. G. Zimmermann (1728-95) to the present time. A precocious child, a man of amazing industry, and a leading physiologist, he was prominent in all branches of medical science. A pupil of Boerhaave, he was a professor for 17 years (1736-53) at Göttingen, where he taught all branches of medicine, and is said to have written 13,000 scientific papers (Garrison). From the age of 23 he carefully abstracted every book he read, and accordingly was able to bring out bibliographies of botany (1771), surgery (1774), anatomy (1774), and medicine (1776), with critical comments on each work. He thus anticipated the extension of bibliography beyond the mere description of the anatomy of books which held the field until this century.

W. G. Ploucquet (1744-1814), a very prolific writer, attempted to catalogue all existing medical works in his 'Initia Bibliotheca medico-practicæ et Chirurgicæ realis', Tübingæ, 1793-1800; his industry was praised by Thomas Young, but his accuracy has been impugned by others. Young, in 1813, brought out an 'Introduction to Medical Literature,' dealing with works published during the previous half century and indicating those of value. Robert Watt (1774-1819), physician to the Royal Infirmary, Glasgow, in 1812 brought out 'A Catalogue of Medical Books

for the Use of Students attending Lectures on the Principles and Practice of Medicine,' 12 years before his posthumous 'Bibliotheca Britannica; or a general Index to British and Foreign Literature.' A. C. P. Callisen (1787-1866), a Danish surgeon, brought out 'Medicinisches Schriftstellen-Lexicon,' in 33 volumes (1830-45), a complete account of medical literature from the middle of the eighteenth to the end of the first quarter of the nineteenth century; this work, as Garrison remarks, rivals von Haller's bibliographies, and is one of the most remarkable achievements of one man. Ludwig Choulant (1791-1861) 'Handbuch der Bücherkunde für die ältere Medecin' (1828) had a second edition in 1841. Sir John Forbes (1787-1861) was the editor of the 'British and Foreign Medical Review', which came out quarterly, and during its existence enjoyed a very high reputation. He published in 1835 a 'Manual of Select Medical Bibliography.'

One of the most remarkable bibliographies ever begun was the 'Medical Bibliography' (1834) of James Atkinson (1759-1839); its dedication partly verbal, partly graphic, ran: "To all idle medical students of Great Britain sit," and then below a drawing of the sacrum. It did not proceed further down the alphabet than B, and, as he humorously spoke of it as tedious and hateful, it may be more than a coincidence that the letter B in the 'Dictionary of National Biography' was easily first in the number of entries, and that C was second. It was far from dull, being packed with anecdote and amusing comments, as would be expected from an author described as a disciple of Rabelais, and well qualified for residence in the abbey of Thélème (Osler). John Armstrong (1709-79), whose pornographic poem, 'Oeconomy of Love' (1736) was described as "hymning the praise of Venus in strains so warm that they dissolved away his practice," complained to Atkinson that he was neglected, and received the reply that the levity of his conduct was responsible, and that he should have recollected that "the nearer a man approaches to the gravity of a brute, the more he is accomplished as a physician." Like some other eminent surgeons, Atkinson collected medical portraits and contemplated, but never did publish, a catalogue with memoirs. Geoffrey Keynes is an outstanding bibliographer of the present day, as his careful studies of Sir Thomas Browne, William Harvey, Blake, John Donne, Hazlitt, Jane Austen and William Pickering testify.

Librarians are a self-denying race, for, as Henry Bradshaw (1831-86) of Cambridge stated, their duty is "to help others rather than to appear themselves in print" and "to save the time of others." Medical librarians have been the godfathers and sometimes even the ghostly progenitors of books and papers, and their

great opportunities for literary research have often created a reputation for others. The debt of the medical profession to librarians is heavy, and as in private duty bound, I desire to express my gratitude to those in attendance at the libraries of the Royal Colleges and the Royal Society of Medicine.

Medical men who have also been whole-time librarians are not numerous. In the recent past, the trio of J. S. Billings, Robert Fletcher (1823-1912) and F. H. Garrison, responsible for 'The Index Catalogue of the Library of the Surgeon-General of the United States Army' (1880) and the 'Index Medicus' (1879-1926) have placed the medical profession under an obligation which it is hardly possible to exaggerate; the financial and other difficulties encountered fully justified Robert Fletcher's witticism "the whole world is in conspiracy against medical bibliographers." The 16 volumes of the first series of the 'Index Catalogue' (1880-95) contained the titles of 85,663 books, 151,504 pamphlets, and 511,112 articles in journals, and the third series is now completed. It has been described as Gargantuan and all other medical bibliographies as Lilliputian in comparison (Osler). The 'Index Medicus,' like the 'Index Catalogue,' had a double entry, subject and author, and came out monthly until 1900, when it sank temporarily in deep financial water. In 1927 it united with the 'Quarterly Cumulative Index to Current Medical Literature,' started by the American Medical Association in 1916, to form the present 'Quarterly Cumulative Index Medicus.' W. H. Welch (1850-) in his third professional chair at the Johns Hopkins University, organized and directed what is now the Welch Library of the Institute of the History of Medicine.

Billings in his time played many parts; a surgeon in the Civil War between the North and South, he was in 1865 put in charge, among other duties in the Surgeon-General's Office, of a collection of 2,253 books, and in 1895 when he was retired from the army, the library contained 116,847 books and 191,598 pamphlets. He was also advisor to the trustees of the Johns Hopkins Hospital, lecturer on the history of medicine there, professor of hygiene at the University of Pennsylvania, an acknowledged authority on public health and hospital organization, and in 1896 became Director of the New York Public Library.

Robert Fletcher, his brilliant second at the Surgeon-General's library, wrote a number of articles on anthropology and strange by-paths in medical history, such as diseases bearing the names of saints. Garrison has covered the whole range of medical history and continues to add thereto.

MISCELLANEOUS LITERARY ACTIVITIES.

Philosophy.—John Locke (1632–1704), philosopher, philanthropist, and physician, is medically known as the friend and attendant of the first Lord Shaftesbury (1621–83), the “Achitophel” of Dryden's satire, whose suppurating hydatid cyst of the liver he opened with a cautery in 1668, as Sydenham's friend, for whose second edition of ‘*Methodus curandi Febres*’ (1668) he contributed a prefatory Latin poem, and as an early advocate of cinchona. Osler in 1908 drew attention to Locke's little known fragment *De Arte Medica* (1669), and A. G. Gibson has reproduced it (1933), and reverently and skilfully added a modern expansion. Locke's short treatise ‘Some Thoughts concerning Education’ (1693) “should endear our old bachelor philosopher of the seventeenth century to despondent parents of the twentieth” (H. C. Cameron). But Locke stands out as a philosopher whose ‘*Essay concerning Humane Understanding*’ (1690), which “even an ordinary woman can read” (Osler), and the ‘*Letters concerning Toleration*’ (1689–92) are classical, as a sound economist and a great social reformer. No medical man has made so many contributions to philosophy and practical politics. Clinicians, when called upon to take a place lower than that of the scientific workers upon whose results they so much depend, may follow Cameron's example and comfort their ruffled feelings with what Dugald Stewart (1753–1828) wrote about Locke :—

“No science could have been chosen more happily than medicine to prepare such a mind for the prosecution of those speculations which have immortalized his name. The complicated and fugitive and often equivocal phenomena of disease, requiring in the observer a far greater proportion of discriminating sagacity than those of physics strictly so called, resemble in this respect much more nearly the phenomena about which metaphysics, ethics and politics are concerned.”

Sir Thomas Browne (1605–82) was a naturalist, a physician, a scholar, moralist, and, though some may not agree, we may be content to follow the French critic Taine in adding philosophy to his accomplishments. James Hutchison Stirling (1820–1909) retired from practice at the age of 31, and wrote a number of books on philosophy in a forcible style like that of Carlyle, and by revealing to English readers the idealistic philosophy of Hegel exerted much influence.

Philology, or the science of language, has attracted few members of the medical profession, but among them is the very distinguished name of Thomas Linacre (? 1460–1524), the founder of the British literary tradition in medicine and of the Royal College of Physicians of London (1518); he has been thought to be the central figure in Robert Browning's 'A Grammarian's Funeral,' with its fine lines:—

Oh, if we draw a circle premature,
Heedless of far gain,
Greedy for quick returns of profit, sure
Bad is our bargain!

Linacre was one of the early teachers of Greek in this country, wrote three books on Latin grammar, the last and most important 'De Emendata structura Latini Sermonis,' published two months after his death. Thomas Fuller (1608–61) wrote "it is questionable whether he was a better grammarian or physician," and Desiderius Erasmus (1466–1536) in his 'Praise of Folly' (1509) says "I knew an old Sophist that was a Grecian, a Latinist, a mathematician, a philosopher, a physician, and all to the greatest perfection."

Francis Adams (1796–1861), a busy practitioner of Banchory-Ternan, not only translated into English the works of Paulus Aegineta (1844–7), Hippocrates (1849) and Aretaeus (1856), but, with the admitted aim of combining "scholastic profundity with popularity," wrote 'Hermes Philologus,' on the difference between Greek and Latin syntax (1826), and also on Greek prosody. Though pressed, he declined to be a candidate for the vacant chair of Greek at Marischal College, Aberdeen. Robert Gordon Latham (1812–88), an Eton scholar, a fellow of King's College, Cambridge, and professor of English Language and Literature at University College, London (1839) brought out a textbook on 'The English Language' (1841), the year before he became medically qualified. A voluminous writer

on etymology and ethnology, he translated the works (1848) and wrote a life of Sydenham, and thoroughly revised Samuel Johnson's dictionary (1870). Though not related to John Latham (1761-1848) or Peter Mere Latham (1789-1875), who were physicians to the Middlesex Hospital, he was elected assistant physician to that hospital in 1844, but resigned five years later. Gordon Hake drew an intimate picture of this handsome man who first dressed as a respectable and later as a shabby clergyman, was logical mentally but illogical in action, could not manage his own finances but believed he was cut out to be Chancellor of the Exchequer, for whose benefit subscriptions were constantly on foot, and who often said with an earnest look and hand on a friend's shoulder, "Will you lend me a sovereign that you will never see again?" M. P. E. Littré (1801-81), the author of the 'Dictionnaire de la langue française' in four volumes (1878) and a supplement (1881), of the 'Dictionnaire de médecine' (1855), of the French translation of the complete works of Hippocrates (10 vols., 1838-61), went through a complete medical course including an internship in Paris, but on account of the death of his father in 1827 and of a sudden access of *res angusta domi*, did not present a thesis for the doctorate; hence, in 1863, Sainte-Beuve wrote of him, "il est membre de l'Académie de Médecine, et il n'est pas docteur." He was also one of the "Immortals," a member of the French Academy, a friend of Auguste Comte (1798-1857), and the author of works on the positivist religion. As de Fleury said, he had an encyclopædic mind. Thomas Young (1773-1829), the greatest man of science who ever entered the medical profession, had nearly completed the 'Enchorial Egyptian Dictionary' at the time of his death, having worked at it with a pencil when no longer able to hold a pen. It was appended to Henry Tattam's 'Compendious Grammar of the Egyptian Language' (1830). He also contributed the important articles on "Egypt" and "Language" in the 'Encyclopædia Britannica'. Much earlier a fellow of the Royal College of Physicians of London, Thomas D'Oylie (1548-1603) had begun a dictionary in Spanish, English, and Latin, but believing that Richard Percyvall was more advanced on much the same task handed it over to him and further helped in the 'Bibliotheca Hispanica,' published in 1591.

Criticism.—C. A. Sainte-Beuve (1804-69), the greatest literary

literary critic of all time, was a medical student in Paris before he wrote the inimitable 'Causeries de Lundi.'

Jean Astruc (1684-1766), had an enormous reputation during his life, was successively professor at Montpellier, Toulouse and Paris, and physician to the King Augustin III of Poland and Louis XV of France. He has been regarded as the founder of the "higher criticism" of the Bible, on account of his 'Conjectures sur les mémoires originaux dont il est permis de croire que Moïse s'est servi pour composer le livre de la Genèse, avec des remarques qui appuient ou éclaircissent ces Conjectures' (1753), which came out anonymously at Brussels. He argued that the books of the Pentateuch were due to a combination of twelve separate documents. Astruc was a very learned man and wrote widely on medical subjects, especially 'De Morbis venereis' (1736), and from consideration of the laws in the Pentateuch about the clean and the unclean was stimulated to the work on the higher criticism. As a son of a priest he was probably also well prepared for Biblical criticism.

Many medical men have also been barristers, but for a medical man to become, as R. B. Finlay (1842-1929) did, Lord Chancellor, is a record not likely to be equalled.

THE DOCTOR IN CURRENT LITERATURE AND FICTION.

The representations of medical men in current literature and fiction are historically useful as evidence of contemporary opinion. Thus Lucian (A.D. ? 120-200) showed that the social position of the profession in Rome was considerably better in his time than earlier when they were mainly slaves in the households of the patricians, and his testimony is the more valuable as he gave vent to satire on medical boastfulness, incompetence and quackery (J. D. Rolleston). Medical practitioners were not admitted to the citizenship of Rome until nearly the Christian era, when Antonius Musa, a Greek, who also attended Vergil, Horace, and Mæcenas, was thus rewarded for his cure, in B.C. 22, of the Emperor Augustus (B.C. 63-14 A.D.) of an obscure and dangerous illness, possibly obstinate constipation (Crawford), by lettuces and cold applications externally.

In 'The Canterbury Tales' (1387) Geoffrey Chaucer (? 1340-1400) gave an appreciative picture of the "Doctour in Phisik," thought to be drawn from John of Gaddesden (? 1280-1361) whose orthodoxy would appear to be rather doubtful by modern standards.

Chaucer indeed remarked that the doctor "loved gold in special," and his praise referred to efficiency in astrology and "natural magic" which were integral parts of medical practice until at least 1500, and it would appear later, for Ben Jonson (? 1573-1637) in 'The Alchemiſt, A Comedy' (1610) held this practice up to ridicule. Although not a sentiment in any way peculiar to the time of Enricius Cordus, the pseudonym of the physician-botanist and poet Heinrich Solde (1486-1535), this may be a suitable place to quote the lines ascribed to him:—

Tres medicus habet facies, unam quando rogatur
 Angelicam; mox est, cum juvat, ipse Deus.
 Post, ubi curato, poscit sua præmia, morbo,
 Horridus apparet, terribilis Satan.

Three faces wears the doctor: when first sought
 An Angel's—and a god's the cure half wrought
 But when that cure complete, he seeks his fee
 The devil then looks less terrible than he.

Another version, quoted by Parkes Weber, is by Timothy Kendall, compiler of 'The Flowers of Epigrammes' (1577):—

Three faces the Phisition hath;
 First as an Angell he,
 When he is sought; next when he helps,
 A God he seems to be;
 And last of all, when he has made,
 The sicke, diseased, well,
 And asks his guerdon, then he seems
 An oughly Fiend of Hell.

In Shakespeare's time (1564-1616) the apothecaries, as shown in 'Romeo and Juliet,' were merely the compounders and vendors of drugs, in William Bullein's phrase the physician's "cooke." The physicians on the other hand were the aristocrats of the profession and, as Herbert R. Spencer describes them, picturesque in their rich robes and elaborate in their Medicean ruffs. The surgeons, of a lower social and educational status, were already regretting their alliance in 1540 with the barbers and kicking against the authority of the physicians who had vetoed their administration of internal remedies; they presented a counter petition in 1621, which after legal delay was rejected in 1627. Robert Burton

(1577-1640), who is so extravagant of his wealth of classical quotations, wrote in 'The Anatomy of Melancholy' (Part II, Sect. 1, 1621), "I would require honesty in every physician that he be not over careless or covetous, harpy-like to make a prey of his patient, or as a hungry surgeon, often produce and wire-draw his cure, so long as there is any hope of pay. Many of them, to get a fee, will give physic to every one that comes when there is no cause, thus as often falleth out, stirring up a silent disease, and making a strong body weak."

The medical profession has been a favourite butt for satire and caricature throughout the ages on the score of ignorance, pretension, inability to avert death, and commercialism. These strictures have been collected by a number of medical writers, such as Jean Bernier (1622-98), who was also rather severe at the expense of his colleagues, and more philosophically others such as G. J. Witkowski (1843-?) in three volumes of 'Le mal qu'on dit des médecins' in the 'nineties of the last century, C. L. Dana 'The Evil Spoken of Physicians' (1902), F. H. Garrison 'The Evil Spoken of Physicians and the Answer Thereto' (1929), F. Parkes Weber (1922), Coriat (1921), Leake (1927), and by Eugen Holländer in his encyclopædic 'Die Karikatur und Satire in der Medizin' (1905, 1921). It has been argued that satire is an inevitable result of progress in medicine, a tribute in a backhanded fashion. There can, however, be little doubt that within due limits it may serve as a useful corrective.

In his 'Pensées' (1670) Blaise Pascal (1623-62), after discussing the influence of imagination, remarked that had it not been for their impressive gowns, caps and other decorative clothing medical men would not have been able to impose on the public. Molière (1622-73) ridiculed the presumption, pomposity, pedantry and cupidity of contemporary medical men in a considerable number of his thirty comedies, especially 'Le médecin volant' (1650), 'L'amour médecin' (1663), 'Don Juan' (1665), 'Le médecin malgré lui' (1666), 'M. de Pourceaugnac' (1669), and 'Le malade imaginaire' (1673) in which the young reactionary 'Thomas Diafoirus' opposes Harvey's discovery of the circulation, and "Dr. Purgon" exploits his *soi-disant* patient and is, on account of his mercenary propensities, compared by Thuillier to "Dr. Knock" in "Jules Romain's" (really Louis Farigoule) 'Knock ou le triomphe de la

médecine' (1923). In connection with that recent French play reference may be made to another, 'Le caducée' (1921), dealing with a fee-splitting quack, written by a medical man, Baron Henri Rothschild under the pseudonym of 'André Pascal.' Maurice Raynaud (1834-82) in the same year (1862) as he graduated with his well-known thesis 'Sur l'asphyxie locale et la gangrène symétrique des extrémités,' described the medical men and the state of medicine in Molière's time; seventy years later Thuillier gave a full account of the medical aspects of Molière's life which terminated on February 17, 1673, from hæmoptysis due to pulmonary tuberculosis, an hour after he had left the theatre where he was playing the part of "Argan" in 'Le malade imaginaire.'

The long-lived gulf between the apothecaries or the predecessors of general practitioners and the fellows of the Royal College of Physicians of London is shown in the mock heroic poem 'The Dispensary' (1699), by Samuel Garth (1661-1718), which tells the story of the quarrel between the apothecaries and the Royal College of Physicians and brings in as slightly disguised the prominent medical men engaged in this dispute. Good-natured Joseph Addison defended Garth from the furious attack on 'The Dispensary' made by Lord Godolphin in 1710, but in the 'Spectator' of 1711 wrote "we may lay it down as a maxim, that when a country abounds in physicians, it grows thin of people," and that "it is usual for physicians to convert one disease into another" instancing the relief of gout by bringing on the stone. Le Sage (1668-1747) in 'Gil Blas' (1715) depicted "Dr. Sangrado" as treating disease by two remedies only, bleeding and hot water, thus symbolizing the contemporary craze for venesection. Voltaire (1694-1778) did not have the same incentive as Molière to satirize the medical profession, for his personal experiences were different and, as he pointed out, the times, customs and costumes had undergone great changes; in fact, he praised French surgery and described his attendant J. B. Silva (1682-1742) as one of the medical men whom Molière neither could or would have dared to make ludicrous. He not unnaturally attacked Gerhard van Swieten (1700-72) who, as prefect of the Imperial library at Vienna, had vetoed the admission of some philosophical works, including one by Voltaire; he did not refrain from the gibes "I know nothing more laughable than a doctor who does not die of old age," and in a letter to a friend "As you are

living with a doctor it is not surprising that you are ill." Samuel Johnson (1709-84) had a high opinion of the medical profession as doing more "good to mankind without a prospect of reward than any profession of man whatever," had many medical friends, and defended them against their critics. As Hutchison says, if an anthology of the tributes paid to the medical profession was ever compiled, Johnson's compliments would take a high place. Oliver Goldsmith (1728-74) perhaps embittered by his unsuccessful experience of practice emitted the following sarcasm in his 'Letters from a Citizen of the World' (1760): "Few physicians here go through the ordinary course of education, but receive all their knowledge by immediate inspiration." Goldsmith had been rather unkindly chaffed on his want of success in practice by Topham Beauclerk (1739-80); Goldsmith, annoyed at criticism of a prescription given to a friend, indignantly declared that he would not treat his friends again, and Beauclerk then broke in 'do not, and whenever you undertake to kill, let it be only your enemies.'

An attractive comparison might be drawn between the medical men in the works of the contemporaries W. M. Thackeray (1811-63), who was the successor of Henry Fielding (1707-54), and those portrayed by Charles Dickens (1812-70) who resembled Tobias Smollett (1721-71) in having a keen eye for oddity and consequently a tendency to substitute caricature for portraiture; Leslie Stephen carried this literary genealogy further back by pointing out that Fielding professed to imitate Cervantes (1547-1616) begetter of the immortal 'Don Quixote' (1615), and Smollett confessed his debt to 'Gil Blas' (1715) of Le Sage (1668-1747). The various medical men appearing in Dickens' books have been pleasantly analysed by Squire Sprigge who agrees that they are drawn "in a spirit of amiable if extensive caricature"; they are but transient figures, never the chief characters, on the stage, mainly general practitioners, and are often in a position approaching the ridiculous. Medicine, however, comes off better than the Law which is held up to contempt, and than the Church which is mainly ignored. It is not so much for his treatment of practitioners as for his descriptions of medical students, "Bob Sawyer" and "Benjamin Allen," and of 'nurses,' "Sairey Gamp" and "Betsy Prig," both long out of date, that Dickens is mainly effective from a medical point of view. 'The Physiology of the London Medical Student,' by Albert Smith

(1816-60), a qualified medical man, appeared in 'Punch' in 1841 and was subsequently edited by his brother Arthur (1825-61), a close associate of Charles Dickens whose description of medical students was on much the same lines as that of Smith.

Thackeray's doctors in the first half of the last century show the distinct difference in the social status of the consultants and the apothecaries; "Arthur Pendennis'" father first kept a shop with a gilt pestle and mortar over the door where toothbrushes and perfumes were for sale; later he rose to the style of the modern general practitioner with a one-horse brougham. Drs. Goodenough and Firmin were the modern consultants. Thackeray did not employ caricature, and did not include any medico-chirurgical types in the 'Book of Snobs' (1848); indeed in chapter xxxi, "A Visit to Some Country Snobs" reference is made to "the doctor, whom Mrs. P. does not condescend to visit: that man educates a mirific family, and is loved by the poor for miles round; and gives them port-wine for physic and medicine gratis. And how these people can get on with their pittance, as Mrs. Ponto says, is a wonder to *her*." In 'Two Years Ago' (1857) Charles Kingsley drew another attractive portrait of the general practitioner in the character of the muscular Christian "Tom Thurnall" fighting the cholera in Aberlva (Clovelly), a picture of the activities in 1848 of his brother George Henry Kingsley (1827-92). Hake from his recollections spoke rather severely of the fashionable physicians in the first half of the last century, Halford (1766-1844), Pelham Warren (1778-1835) and W. F. Chambers (1786-1855), who made large fortunes but published little or nothing, because "that would have been to give their knowledge away, whereas what they wanted was to be paid." This infirmity of noble mind in keeping silent even from good words cannot with justice be laid to the charge of recent generations. In 'Middlemarch' (1872) George Eliot put an opinion, probably then becoming somewhat old-fashioned, into "Lady Chetham's" mouth *à propos* of "Tertius Lydgate": "I like a medical man more on a footing with the servants; they are often all the cleverer. I assure you I found poor Hicks' judgment unfailing; I never knew him wrong. He was coarse and butcher-like, but he knew my constitution."

Some of the doctors represented in fiction are known or suspected to have been largely drawn from life, and there must be many

portraits which have not been generally identified. Among those known to have been portraits, at any rate to some extent, are the following: in Molière's 'L'Amour médecin' and other comedies the Court physicians of the time—D'Aquin, Esprit, Des Fougereais, Guénaut, and Séquin, names otherwise forgotten—were satirized in a manner leaving little doubt as to their identity (Raynaud; Thuillier), just as was the case in Léon Daudet's 'Les Morticoles' (1894) and in 'The Doctor's Dilemma' (1906) of Bernard Shaw who has been called the "modern Molière."

In 'Tristram Shandy' (1759), Laurence Sterne (1713-68) unjustifiably satirized John Burton (1710-71), M.B. of St. John's College, Cambridge, with a doctorate of Rheims, the man-midwife and author of the 'Monasticon Eboracense and the Ecclesiastical History of Yorkshire' (1758), in the character of "Dr. Slop." As Alban Doran (1849-1927) and Herbert R. Spencer have shown, a political feud between the tory Burton and the whiggish Jacques Sterne, with whom was his nephew Laurence, accounted for the creation of "Dr. Slop." Burton, who founded the York Hospital, also wrote 'A Treatise on the Non-Naturals' (1738); this was an old medical term for the six things necessary to health, but liable by abuse or accident to become the cause of disease, viz., air, meat and drink, sleep and waking, motion and rest, excretion and retention, and affections of the mind. This excited the ridicule of the author of 'Tristram Shandy' who could not understand "why the most natural actions of a man's life should be called his non-naturals." It is perhaps a crude form of poetic justice rather than a curious coincidence that the "resurrectionists" unconsciously avenged this attack on a distinguished obstetrician by exhuming Laurence Sterne's body and selling it to Cambridge for dissection by future medical men. In the 'Sentimental Journey' (1768), Sterne gibbeted Smollett as "Smellfungus" on account of the splenetic style of his 'Travels through France and Italy' (1766). Smollett satirized Akenside's arrogance in 'Peregrine Pickle' (1751).

It has often been suggested that Thackeray drew the picture of Dr. Goodenough from John Elliotson (1791-1868); but Squire Sprigge concludes that the only evidence for this is his warm dedication of 'Pendennis' to Elliotson in 1850, 12 years after his resignation from University College Hospital on account of his advocacy of animal magnetism. "Tertius Lydgate," in George

Eliot's 'Middlemarch,' was in part drawn from Clifford Allbutt, whom she knew in 1868, when he was about 32 years old. His "Brother Reggie," Osler, appeared as "Fowler" in W. S. Thayer's 'Medical Education of Jones,' by "Smith" ('Harvard Graduates' Magazine', March, 1927,), thus recalling as an explanation Basil Gildersleeve's sonnet beginning "William the Fowler, Guillaume L'Oiseleur," which was printed below his portrait in the 'Johns Hopkins Hospital Bulletin' (1919, XXX, plate 25). As Malloch pointed out in his tribute in Maude Abbott's collection of Appreciations and Reminiscences ('Bull. Internat. Assoc. Med. Museums', No. IX, 1926, 379), Osler appears as "Sir Richard Holter" in E. S. Martin's 'Abroad with Jane' (1919). Osler's pseudonym, which he used occasionally in early life in writing fantastic papers, in rare reviews, and in hotels when anxious to pass unknown, of "Egerton Yorrick Davis" is fully described in Harvey Cushing's "Life" (Vol. I, pp. 240-1), where it is aptly compared to Barrie's later "McConnachie" (1922).

As is well known, Conan Doyle took the methods of "Sherlock Holmes" from the diagnostic procedure of Joseph Bell (1837-1911), the Edinburgh surgeon. I have been informed that a medical man practising in Southsea states that he is the model from whom the character of "Dr. Watson" was taken. "Professor Challenger," in 'The Lost World,' was drawn from William Rutherford (1839-99), professor of physiology at Edinburgh. There is the highest authority possible for the statement that "Dr. Thorndyke," who first appeared nearly 30 years ago in Austin Freeman's detective stories, is not a portrait. The character of "Dr. Prohack" in Arnold Bennett's novel of that name (1922), was understood to be based on the late Dr. Gomez.

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